AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A method for visualizing correlation data concerning two biological events or the correlation data and feature data regarding each event in a matrix format <u>in a suitably programmed computer</u>, the <u>computerized</u> method comprising:

acquiring correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event;

processing said correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event ; and

displaying said correlation data concerning biological events of the same or different kinds, or the correlation data and feature data regarding each biological event in (a) one of a plurality of prepared data display formats and at (b) one of a plurality of prepared summarization levels, either manually or automatically, depending on the number of data items in desired display data, in order to visualize said correlation data and said feature data.

2. (Original) The visualizing method according to claim 1, wherein the plurality of data display formats (a) from which one is selected include: (A) a table data display format having correlation data concerning a pair of events as a single display data unit; (B) a table data display format having correlation data concerning clusters obtained as a result of clustering of events as a single display data unit; and (C) a data display format having the result of statistically processing a set of correlation data as a single display data unit.

3. (Original) The method for visualizing correlation data concerning biological events according to claim 2, wherein the clustering method (B) comprises clustering based on attribute information regarding the two biological events or correlation information between the two biological events.

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4. (Previously Presented) The visualizing method according to claim 2, wherein, in the table data display format (B) having correlation data concerning clusters as a single table data unit, the result is rearranged on a diagonal in order of decreasing correlation intensity from the upper left of the table.

5. (Original) The visualizing method according to claim 1, comprising a summarization method selected from the plurality of summarization levels (b) that include display or non-display of a data field, reduction of data in a data field of the character type, and reduction of data in a data field of the numeric value type.

6. (Previously Presented) The visualizing method according to claim 5, wherein the reduction of data in the data field of the character type comprises operations of extracting a part of layers of character information in a layered structure, extracting a keyword from the character data that is registered in advance, and associating the character data with a single sign, letter, or color.

7. (Previously Presented) The visualizing method according to claim 5, wherein the reduction of data in the data field of the numerical value type comprises operations of rounding a numerical value type to a significant digit, extracting only an exponential portion of the numerical value type, and associating said numerical value type in a certain range with a color.

8. (Original) The visualizing method according to claim 1, wherein the method for automatically selecting the screen display format and the summarization level of data comprises selecting a pair of a data display format and a data summarization level depending on the number of entries of the correlation data to be displayed on screen and the size of an information display region and an information display unit that are designated in advance, such that a maximum amount of information can be provided.

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9. (Original) The visualizing method according to claim 1, wherein a plurality of kinds of correlation data concerning the biological events are displayed simultaneously in the cells of the matrix in an identifiable manner.

10. (Original) The visualizing method according to claim 1, wherein the correlation data concerning the biological events comprises an interaction between LMW compounds and proteins.

11. (Original) The method for visualizing correlation data concerning biological events according to claim 1, wherein, as the biological events, a structural unit is defined on the basis of atoms in a molecule or a set of atoms in a molecule for each molecule in a complex of one or more molecules, a representative position of the structural unit is defined on the basis of the coordinates of atoms of which the structural unit is composed, and information about the distance between the representative positions of the structural units is displayed in the cells in the matrix, said matrix having each of the structural units as elements in the rows and columns thereof.

12. (Original) A method for analyzing correlation information concerning two biological events, comprising extracting a feature quantity of the biological events that is common to the members of the clusters according to claim 2.

13. (Previously Presented) A method for analyzing correlation information concerning two biological events according to claim 12, wherein said feature quantity of the biological events is represented by one or a plurality of elements consisting of values or text, or a three-dimensional structure of a molecule.

14. (Cancelled)

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15. (**Currently Amended**) A ~~tangible~~ computer-readable recording medium having stored thereon a computer program for visualizing correlation data concerning two biological events or the correlation data and feature data regarding each event in a matrix format, said computer program, when executed, causing a computer to perform the steps of:

acquiring correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event;

processing said correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event ; and

displaying said correlation data concerning biological events of the same or different kinds, or the correlation data and feature data regarding each biological event in (a) one of a plurality of prepared data display formats and at (b) one of a plurality of prepared summarization levels, either manually or automatically, depending on the number of data items in desired display data, in order to visualize said correlation data and said feature data.

16. (**Currently Amended**) A ~~tangible~~ computer-readable recording medium having stored thereon a computer program for analyzing correlation information concerning two biological events, said computer program, when executed, causing a computer to perform the steps of:

acquiring correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event;

processing said correlation data concerning biological events of the same or different kinds, and feature data regarding each biological event ; and

displaying said correlation data concerning biological events of the same or different kinds, or the correlation data and feature data regarding each biological event in

(a) one of a plurality of prepared data display formats selected from the group consisting of (A) a table data display format having correlation data concerning a pair of events as a single display data unit; (B) a table data display format having correlation data concerning clusters obtained as a result of clustering of events as a single display

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data unit; and (C) a data display format having the result of statistically processing a set of correlation data as a single display data unit and at

(b) one of a plurality of prepared summarization levels;

selecting one of (a) or (b), either manually or automatically, depending on the number of data items in desired display data;

extracting a feature quantity of the biological events that is common to the members of said clusters.

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